

*Sub D6*  
*C6* 1. (Twice amended) An isolated nucleic acid comprising a polynucleotide that hybridizes under highly stringent conditions to a SEQ ID NO:1, base pairs 57583-58854, wherein said polynucleotide encodes a protein that has an oxidase activity.

*Sub D7*  
*C7* 10. (Twice amended) The nucleic acid of claim 9, wherein the sequence of said protein is SEQ ID NO:115.

*Sub D8*  
*C8* 12. (Twice amended) The nucleic acid of claim 9, wherein said nucleic acid further comprises a nucleic acid encoding a protein encoded by SEQ ID NO:99.

13. (Twice amended) The nucleic acid of claim 9, wherein said nucleic acid further comprises a nucleic acid encoding a protein selected from the group consisting of SEQ ID NO:113, SEQ ID NO:109, and SEQ ID NO:96.

14. (Twice amended) The nucleic acid of claim 9, wherein said nucleic acid further comprises a nucleic acid encoding a protein selected from the group consisting of SEQ ID NO:107, SEQ ID NO:106, SEQ ID NO:102, SEQ ID NO:101, SEQ ID NO:100, SEQ ID NO:98, and SEQ ID NO:97.

*Sub D9*  
*C9* 21. (Twice amended) An isolated gene cluster comprising a nucleic acid, which nucleic acid comprises open reading frames encoding polypeptides sufficient to direct the assembly of a bleomycin or a bleomycin analogue, wherein a polypeptide of the polypeptides is SEQ ID NO:115.

*Sub D10*  
*C10* 40. (Twice amended) An expression vector comprising the nucleic acid of any one of claims 1, 2, 3, 9, 10, 12, 13, 14, and 21.

*Sub D11*  
*C11* 71. (Amended) A cell comprising a modified bleomycin gene cluster, wherein the modified bleomycin gene cluster comprises a nucleic acid which encodes a protein comprising SEQ ID NO:115, said cell producing elevated amounts of bleomycin as compared to the wild type cell.

*Sub D12*  
*C12* 73. (Twice amended) The cell of claim 71, wherein said cell overexpresses a resistance gene from the bleomycin gene cluster and wherein said resistance gene is a selected from the group consisting of blmA and blmB.